

PATENT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Inventor: Kevin T. Chang et al.)	Confirmation No.: 7061
)	
)	Customer No.: 000043471
U.S. Serial No.: 09/927,841)	
)	Art Unit: 2614
Filed: August 10, 2001)	
)	Examiner: Shang, Annan Q
)	
Title: BTI RF Module With Filtering		

Pre-Appeal Brief

Mail Stop Amendment
Commissioner For Patents
P.O. Box 1450
Alexandria VA 22313-1450

Sir,

In response the Final Office action mailed on January 25, 2008, having a shortened statutory period of time set to expire on April 25, 2008, a petition for a two month extension of time up to June 25, 2008, being submitted herewith, please reconsider the above application as follows:

Remarks for Pre-Appeal Brief Request

Claims 7-19 are pending in this application, of which claims 7 and 13 are independent. Claims 7-18 stand rejected under 35 U.S.C. §103 as being obvious over USP No. 5,815,794 to Williams in view of USP No. 5,020,129 to Martin. Claim 19 stands rejected under 35 U.S.C. §103 as being obvious over Williams in view of Martin and further in view of USP No. 6,678,893 to Jung. Applicants respectfully traverse these rejections for the reasons set forth below.

Most importantly, even assuming *arguendo* that the combination of the foregoing references is proper, the combination still fails to disclose or suggest the cable system as recited by claims 7 and 13. As recited by the pending claims, the present disclosure relates a cable system having an RF module coupled to provide bi-directional communication between the subscriber and the head end. The RF module comprises upstream and downstream signal paths; where at least the upstream signal path includes filters. The RF module further comprises a controller for selectively providing unimpeded, partially impeded and full cut off of cable services in the upstream path, and for controlling the gain and attenuation in the upstream signal path, where ***the level of attenuation depends on the maximum upstream level from an interface associated with the RF module*** (e.g., the home/subscriber interface).

At a minimum, none of the cited prior art references disclose or suggest the use of an RF module having a controller *for selectively providing unimpeded, partially impeded and full cut off of cable services in the upstream path, where the level of attenuation depends on the maximum upstream level from an interface associated with the RF module.*

Turning to the prior art, Williams discloses the use of a time-division multiplexing system, which allocates each of the subscriber's terminal equipment a specific time slot for transmitting data to the head end on the return path. William's further discloses the use of switches (*see*, elements 350-353 in Fig. 3) which isolate the remote point from the network when the given remote point is not allocated a time slot in the TDMA multiplexing scheme (*i.e.*, the return path is only connected to the network when it is allocated a time slot – *see*, Williams, col. 3, lines 9-17). It appears that the only mention of adjusting the power level in the return path is by the data modulator 445, which appears to adjust the transmission power levels in accordance with the modulation technique being utilized. Importantly, however, nowhere does Williams appear to control the gain and attenuation of the upstream path by switching the filters utilized in the upstream path, where the level of attenuation depends on the maximum upstream level from an interface associated with the RF module. Indeed, the present device is quite distinct from Williams in that the TDMA process of Williams simply allows for an unimpeded connection or an open connection between the remote point and the head end. Nowhere does Williams appear to even consider that a partially impeded state is possible as is provided by the Applicants' device which allows for a manipulation of the filters utilized in the upstream path.

Martin clearly fails to cure the foregoing deficiencies in Williams. Martin relates to a downstream filtering technique to selectively provide premium content channels to the subscriber (*see*, Abstract, Fig. 1, col. 5, lines 19-42). Martin does not appear to provide any disclosure or suggestion regarding controlling the gain and attenuation in the

upstream path, much less controlling the level of attenuation dependent on the maximum upstream level from an interface associated with the RF module.

Thus, it is first noted that any modification of the device in Williams based on the teaching of Martin would only result in a manipulation or modification of the operation of the downstream path, not the upstream path. Indeed, Martin is not concerned with the upstream path, as the entire objective of Martin is how to control content delivery to the subscriber, which is only delivered on the downstream path. It would be nonsensical to suggest utilizing Martin's technique with an upstream path, and no one of skill in the art would be motivated to do so. It is note worthy that the pending rejection does not attempt to assert that Martin's technique is also applicable to the upstream data path, and simply refers to the downstream path when formulating the rejection. However, as noted above, the pending claims recite controlling the gain and attenuation in the upstream path.

Second and more importantly, even assuming *arguendo* that there was proper motivation to combine Williams and Martin and apply the teaching of Martin to the upstream path, the combination would still fail to disclose or suggest an RF module having a controller *for selectively providing unimpeded, partially impeded and full cut off of cable services in the upstream path*, where the level of attenuation depends on the maximum upstream level from an interface associated with the RF module.

Accordingly, as the prior art must disclose or suggest each of the elements recited by the claim in order to establish a *prima facie* case of obviousness (*see*, M.P.E.P. 2143.03), and for at least the foregoing reasons it is clear that the combination of Williams and Martin fails to do so, it is respectfully submitted that both claims 7 and 13 are patentable over Williams and Martin taken alone or in combination with one another.

Dependent claims 8-12 and 14-19 are also patentability distinguishable over Williams and Martin at least because these claims respectively include all the limitations recited in independent claims 7 and 13.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 502117 and please credit any excess fees to such deposit account.

Respectfully submitted,

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